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Amendments to the Claims:

1. (Cancelled)

2. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein the cell is a protist cell.

- 3. (Original) The dsRNA expression vector of claim 2, wherein the protist cell is a protozoan parasite cell.
- 4. (Original) The dsRNA expression vector of claim 2, wherein the protist cell is a Trypanosoma, Leishmania, Toxoplasma, or Plasmodium cell.

Claims 5 and 6 (Cancelled)

- 7. (Currently amended) The dsRNA expression vector of claim 1 A double-stranded RNA (dsRNA) expression vector comprising:
  - (a) a double-stranded designated DNA sequence of interest from a protist; and
- (b) a pair of promoters on opposite ends of the designated DNA sequence, wherein the promoters are oriented towards each other and wherein each is capable of initiating transcription of a strand of the double-stranded DNA sequence into RNA in a cell, wherein the designated DNA sequence comprises is an essential gene, or a fragment thereof, from a protist.
- 8. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein the designated DNA sequence comprises is an essential gene, or a fragment thereof, from a protozoan parasite.

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9. (Currently amended) The dsRNA expression vector of claim 8, wherein the designated DNA sequence emprises is an essential gene, or a fragment thereof, from *Trypanosoma*, *Leishmania*, *Toxoplasma*, or *Plasmodia*.

- 10. (Currently amended) The dsRNA expression vector of claim 8, wherein the designated DNA sequence comprises is a gene, or a fragment thereof, that is normally active during the protozoan's lifecycle when the protozoan is living in a mammalian host.
- 11. (Currently amended) The dsRNA expression vector of claim 8, wherein the designated DNA sequence comprises a gene, or a fragment thereof, that is normally active during the protozoan's lifecycle when the protozoan is living in a mammalian host, but is not active during the protozoan's lifecycle when the protozoan is living in an insect host.
- 12. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein each of the pair of promoters is the same type of promoter.
- 13. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein each of the pair of promoters is a different type of promoter.
- 14. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein at least one of the pair of promoters is a eukaryotic, prokaryotic or viral promoter.
- 15. (Original) The dsRNA expression vector of claim 14, wherein at least one of the pair of promoters is a ribosomal RNA promoter, a *T. brucei* variant surface glycoprotein (VSG) gene promoter, or a procyclic acidic repetitive protein (PARP) gene promoter.

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16. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein at least one of the pair of promoters is a bacteriophage T7 promoter, a bacteriophage T3 promoter, or an bacteriophage SP6 promoter.

- 17. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein at least one of the pair of promoters is an inducible promoter.
- 18. (Currently amended) The dsRNA expression vector of claim 15, wherein the ribosomal RNA promoter is derived from *Trypanosoma*, *Leishmania*, *Toxoplasma*, or *Plasmodia*.

Claim 19 (Cancelled)

- 20. (Currently amended) The dsRNA expression vector of claim 19A double-stranded RNA (dsRNA) expression vector comprising:
  - (a) a double-stranded designated DNA sequence of interest obtained from a protist;
- (b) a pair of promoters on opposite ends of the designated DNA sequence wherein the promoters are oriented towards each other and wherein each is capable of initiating transcription of a strand of the double-stranded DNA sequence into RNA in a cell, and
- (c) a vector backbone, wherein the backbone is a *Trypanosoma*, a *Leishmania*, a *Toxoplasma*, or a *Plasmodia* expression vector.
- 21. (Currently amended) The dsRNA expression vector of claim [[1]] <u>20</u>, wherein the vector is effective in a protist.
- 22. (Original) The dsRNA expression vector of claim 21, wherein the protist is *Trypanosoma*, *Leishmania*, *Toxoplasma*, or *Plasmodia*.

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23. (Currently amended) The dsRNA expression vector of claim [[1]] <u>20</u>, further comprising sequences for integrating the vector into the genome of the cell.

- 24. (Currently amended) The dsRNA expression vector of claim [[1]] 7, further comprising an expression regulatory region.
- 25. (Original) The dsRNA expression vector of claim 24, wherein the regulatory region comprises a tetracycline operator sequence, a lactose operator sequence, a transcription termination sequence or another transcription regulatory element.
- 26. (Currently amended) A cell containing the dsRNA expression vector of claim [[1]] 7, 20 or 69.
- 27. (Previously presented) The cell of claim 26, wherein the vector is integrated into the genome of the cell.
- 28. (Previously presented) The cell of claim 26, wherein the dsRNA expression vector further comprises an expression regulatory region.
- 29. (Previously presented) The cell of claim 26, wherein at least one of the pair of promoters is an inducible promoter.

Claims 30-68 (Cancelled)

- 69. (New) A double-stranded RNA (dsRNA) expression vector comprising:
- (a) a double-stranded designated DNA sequence of interest obtained from a protist; and

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(b) a pair of promoters on opposite ends of the designated DNA sequence, wherein the promoters are oriented towards each other and wherein each is capable of initiating transcription of a strand of the double-stranded DNA sequence into RNA in a cell, wherein at least one of the pair of promoters is a ribosomal RNA promoter, a *T. brucei* variant surface glycoprotein (VSG) gene promoter, or a procyclic acidic repetitive protein (PARP) gene promoter.